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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of			Date	: January 21, 2002
WEI HUANG, MERL F. HOEKSTRA, J. RICHARD SPORTSMAN, and EWALD A. TERPETSCHNIG			Our Docket	: LJL 357
Serial No.	: 09/844,655		Group Art	: 1645
Filed	: April 27, 2001		Examiner	: Not Assigned
For	: MOLECULAR MODIFICATION ASSAYS			

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Commissioner of Patents
Washington, D.C. 20231

Sir:

PETITION TO MAKE SPECIAL PURSUANT TO 37 C.F.R § 1.102(d) AND MPEP § 708.02(X)

Applicants hereby petition the Commissioner to make special the above-identified patent application under the provisions of 37 CFR § 1.102(d) and MPEP § 708.02(X). This petition is accompanied by (1) the appropriate petition fee, and (2) a statement explaining how the invention contributes to the diagnosis, treatment, or prevention of HIV/AIDS or cancer, as required by MPEP § 708.02(X).

Petition Fee

Applicants have enclosed a check for $130.00 for payment of the petition fee set forth in 37 C.F.R. § 1.17(h). The Commissioner is hereby authorized to charge any additional fees or to credit any overpayment to Deposit Account No. 11-1540. A duplicate copy of this petition is enclosed.

Contribution to the diagnosis, treatment, or prevention of cancer

The invention provides assays for detecting molecular modifications and the presence and/or activity of enzymes and other agents involved in facilitating or otherwise regulating such modifications. (Application, page 3, lines 2-5.) In particular, the invention provides assays for detecting (1) phosphate modifications, including the phosphorylation and dephosphorylation of polypeptides and the cyclization and decyclization of nucleotides, and (2) enzymes related to such modifications, including kinases, phosphatases, cyclases, and phosphodiesterases. (Application, page 20, line 8 to page 21, line 10.)

The physiological modification of molecules is an important component of the signal transduction and regulation pathways in cells. (Application, page 3, lines 7-8.) Significantly, errors in these pathways have been shown to cause cancer, as well as other diseases. (Application, page 13, lines 5-6.) Indeed, a primary cause of cancer is a mutation that makes a stimulatory gene product hyperactive, converting a proto-oncogene into an oncogene. (Application, page 13, lines 6-8.) The primary classes of known proto-oncogenes include the following cell-signaling proteins: (1) growth-factor receptors acting via tyrosine kinases, (2) GTP binding proteins, (3) membrane/cytoskeleton-associated tyrosine kinases, (4) cytoplasmic tyrosine kinases, (5) steroid-type growth-factor receptors, and (6) S/T kinases. These proteins and their associated pathways may be responsible for and/or regulated by phosphate modifications. (Application, page 13, lines 8-13.) Thus, the assays provided by the invention, particularly those that utilize

luminescence polarization, luminescence resonance energy transfer, and/or luminescence intensity to detect phosphate modifications, offer tremendous potential for basic cancer research, cancer drug research, accelerated cancer drug discovery, and high-throughput screening, among others.

In summary, applicants believe that they have complied with the requirements for obtaining special status under 37 CFR § 1.102(d), as set forth in MPEP § 708.02(X), and therefore respectfully request that the above-identified patent application be made special.

CERTIFICATE OF MAILING

I hereby certify that this correspondence including a check for $130.00 to cover the associated fee is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231 on January 21, 2002

Shannon Verboort

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Respectfully submitted,

KOLISCH, HARTWELL, DICKINSON, McCORMACK & HEUSER

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